

BLACK & DECKER IM

PROFESSIONAL Electronic

No. 3335
PROFESSIONAL
Electronic.
5 H.P.

ROUTER

Your Black & Decker HeavyDuty Router is specifically
designed for continuous
operation in the builder
trades and in industrial plants
requiring maximum
performance, particularly on
hard woods and aluminum.
This manual is provided for your
convenience in the use and care of your new
Black & Decker Router. These instructions
include operation, accessory
recommendations, maintenance, safety and
precautions.

IMPORTANT SAFETY INSTRUCTIONS (FOR ALL TOOLS)

WARNING: When using Electric Tools, basic safety precautions should always be followed to reduce the risk of fire, electric shock, and personal injury, including the following:

READ ALL INSTRUCTIONS

- KEEP WORK AREA CLEAN. Cluttered areas and benches invite injuries.
- CONSIDER WORK AREA ENVIRONMENT. Don't expose power tools to rain. Don't use power tools in damp or wet locations. Keep work area well lit.
- 3. GUARD AGAINST ELECTRIC SHOCK. Prevent body contact with grounded surfaces. For example: pipes, radiators, ranges, refrigerator enclosures.
- KEEP CHILDREN AWAY. All visitors should be kept away from work area. Do not let visitors contact tool or extension cord.
- 5. STORE IDLE TOOLS. When not in use, tools should be stored in dry, and high or locked-up place—out of reach of children.
- DON'T FORCE TOOL. It will do the job better and safer at the rate for which it was intended.
- 7. USE RIGHT TOOL: Don't force small tool or attachment to do the job of a heavy-duty tool. Don't use tool for purpose not intended, for example, don't use circular saw for cutting tree limbs or logs.
- 8. DRESS PROPERLY. Do not wear loose clothing or jewelry. They can be caught in moving parts. Rubber gloves and nonskid foot wear are recommended when working outdoors. Wear protective hair covering to contain long hair.
- USE SAFETY GLASSES. Also use face or dust mask if cutting operation is dusty.
- DON'T ABUSE CORD. Never carry tool by cord or yank it to disconnect from receptacle. Keep cord from heat, oil, and sharp edges.
- 11. SECURE WORK. Use clamps or a vise to hold work. It's safer than using your hand and it frees both hands to operate tool.
- 12. DON'T OVERREACH. Keep proper footing and balance at all times.
- 13. MAINTAIN TOOLS WITH CARE. Keep tools sharp and clean for better and safe performance. Follow instructions for lubricating and changing accessories. Inspect tool cords periodically and if damaged have repaired by authorized service facility. Inspect extension cords periodically and replace if damaged. Keep handles dry, clean, and free from oil and grease.
- 14. DISCONNECT TOOLS. When not in use, before servicing, and when changing accessories, such as blades, bits, cutters.
- 15. REMOVE ADJUSTING KEYS AND WRENCHES. Form habit of checking to see that keys and adjusting wrenches are removed from tool before turning it on.
- 16. AVOID UNINTENTIONAL STARTING. Don't carry plugged-in tool with finger on switch. Be sure switch is off when plugging in.
- 17. OUTDOOR USE EXTENSION CORDS. When tool is used outdoors, use only extension cords intended for use outdoors and so marked.
- STAY ALERT. Watch what you are doing. Use common sense. Do not operate tool when you are tired.
- 19. CHECK DAMAGED PARTS. Before further use of the tool, a guard or other part that is damaged should be carefully checked to determine that it will operate properly and perform its intended function. Check for alignment of moving parts, binding of moving parts, breakage of parts, mounting, and any other conditions that may affect its operation. A guard or other part that is damaged should be properly repaired or replaced by an authorized service center unless otherwise indicated elsewhere in this instruction manual. Have defective switches replaced by authorized service center. Do not use tool if switch does not turn it on and off.
- DO NOT OPERATE portable electric tools near flammable liquids or in gaseous or explosive atmospheres. Motors in these tools normally spark, and the sparks might ignite fumes.
- IF THE TOOL DOES NOT OPERATE when turned on, unplug the tool, allow the tool to rest at room temperature and try again before returning for service.
- 22. Wear ear protection for extended use.
- KEEP AIR SLOTS CLEAN FOR BETTER AND SAFER PER-FORMANCE.

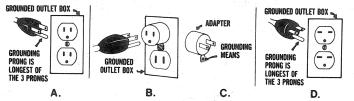
GROUNDING INSTRUCTIONS

This tool should be grounded while in use to protect the operator from electric shock. The tool is equipped with an approved three-conductor cord and three-prong grounding type plug to fit the proper grounding type receptacle. The green (or green and yellow) conductor in the cord is the grounding wire. Never connect the green (or green and yellow) wire to a live terminal.

If your unit is for use on less than 150 volts, it has a plug like that shown in Figure A.

If it is for use on 150 to 250 volts, it has a plug like that shown in Figure D.

An adapter, Figures B and C, is available for connecting Figure A plugs to two-prong receptacles. The green-colored rigid ear, lug, etc., must be connect to a permanent ground such as a properly grounded outlet box. No adapter is available for a plug as shown in Figure D. Adapter shown in Figure B & C is Not for Use in Canada.



We recommend that you NEVER disassemble the tool or try to do any rewiring in the electrical system. Any repairs should be performed only be B & D Service Centers or other qualified service organizations. Should you be determined to make a repair yourself, remember that the green colored wire is the "grounding" wire. Never connect this green wire to a "live" terminal. If you replace the plug on the power cord, be sure to connect the green wire only to the grounding (longest) prong on a 3-prong plug.

SAVE THESE INSTRUCTIONS

MOTOR

Your Black and Decker tool is powered by a B & D-built motor. Be sure your power supply agrees with voltage marked on nameplate. Volts 50/60 Hz means Alternating Current only. Volts DC-60 Hz or AC/DC means it will also operate on Alternating Current or Direct Current. Voltage decrease of more than 10% will cause loss of power and overheating.

EXTENSION CORDS

Tools that have 3 wire cords requiring grounding must only be used with extension cords that have 3-prong grounding type plugs and 3-pole receptacles. Only round jacketed extension cords should be used, and we recommend that they be listed by Underwriters Laboratories (U.L.) (C.S.A. in Canada). If the extension will be used outside, the cord must be suitable for outdoor use. Any cord marked as outdoor can also be used for indoor work.

An extension cord must have adequate wire size (AWG or American Wire Gauge) for safety, and to prevent loss of power and overheating. The smaller the gauge number of the wire, the greater the capacity of the cable, that is 16 gauge has more capacity than 18 gauge. When using more than one extension to make up the total length, be sure each individual extension contains at least the minimum wire size.

To determine the minimum wire size required, refer to the chart below:

| NAMEPLATE | TO | TAL E | XTENS | SION C | ORD | LENG | ΓH - F | EET |
|-------------|----|-------|-------|--------|-----|------|--------|-----|
| RATING-AMPS | 25 | 50 | 75 | 100 | 125 | 150 | 175 | 200 |
| 0-10.0 | 18 | 18 | 16 | 16 | 14 | 14 | 12 | 12 |
| 10.1-13.0 | 16 | 16 | 14 | 14 | 14 | 12 | 12 | 12 |
| 13.1-15.0 | 14 | 14 | 12 | 12 | 12 | 12 | 12 | |

Before using an extension cord, inspect it for loose or exposed wires, damaged insulation, and defective fittings. Make any needed repairs or replace the cord if necessary. Black & Decker has extension cords available that are U.L. (C.S.A. in Canada) listed for outdoor use.

INTRODUCTION

You have just purchased a portable router which incorporates a state of the art electronic motor control. The control system governs the motor to give you easy start-up, smooth cutting, and higher power output. These unique capabilities give you, the user, a router which is responsive to your needs.

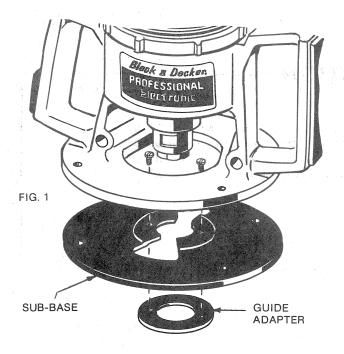
OPERATING INSTRUCTIONS

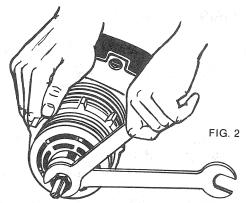
Before operating your new router, you should familiarize yourself with all of the features of this unit.

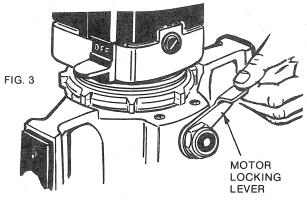
1. MOTOR CONTROL SYSTEM

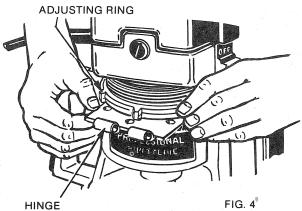
The electronic motor control system has four basic features.

- A. Ramp start when you turn on the router, you will notice that it does not have the jerk from the rapid acceleration of the motor. This router has a starting circuit which accelerates the motor up to speed smoothly, without jerking, and allows you to maintain easier control of the router during the start-up period.
- B. Constant speed cutting as you load the router, the selected cutting speed does not slow down during normal use. The electronic control governs the motor and gives you a consistent finish to your work. Only under very heavy loading will the speed of the unit fall below the governed speed.









2. SUB-BASE DESIGN

The sub-base of this router has been designed to provide better visibility during freehand routing while still maintaining the capability to use standard template guides. If you do not intend to use template guides, remove the guide adapter from the sub-base. Save the adapter in case you need to use the template guides in the future. See Figure 1.

3. COLLET SYSTEM

A special coating has been added to the collet system to increase the bit holding power. Tightening of the collet with the wrenches provided will give adequate bit retention. Using other wrenches or tools to tighten the collet might degrade or damage this coating from overtightening. See Figure 2.

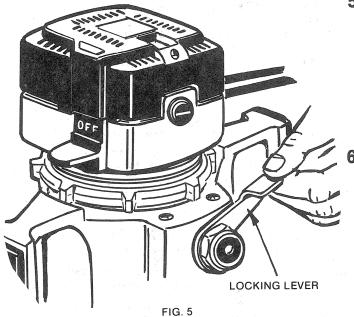
ATTACHING BITS AND CUTTERS

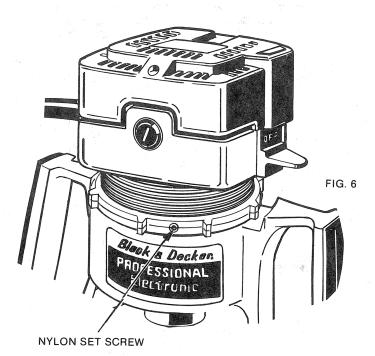
DISCONNECT POWER CORD FROM ELECTRICAL SOURCE. Figure 2 illustrates the router with the base removed to simplify insertion of the bit or cutter. The shank of the bit or cutter should be inserted as deep as possible to keep runout and deflection to a minimum. Use the two open end wrenches provided to install and remove bits. One wrench is used as a stop on the collet adaptor while the other wrench is used to tighten or loosen the collet.

4. DEPTH ADJUSTMENT

NOTE: Release motor locking lever before making any adjustments. Turn ring clockwise when viewed from top of unit to retract bit upward. (Fig. 3). Turn ring counterclockwise to advance the bit into the work. For fine adjustment, there is a datum line located in the locking lever area. While making an adjustment, every time a succeeding lug on the adjusting ring passes the datum line the bit is raised or lowered 1/64th of an inch. Finer adjustments can be made by estimating that the increment between each lug is .015 inches. (Example: estimate of 1/3 distance between lugs is .005 inches.) One full turn of the adjusting ring results in 1/8" raising or lowering of the bit. Lugs are consecutively numbered for easy reference. For fast adjustment, lift motor unit free of base and spin ring.

Duplicating specific depths of cut such as hinge butt mortises (see Fig. 4) can be quickly done in this manner. Lower the bit until the tip just touches the work surface. Lock the adjusting lever. Then raise the adjusting ring until hinge can be inserted snugly between the ring and base. Remove hinge. Invert the router so the bit does not mar the work surface. Release locking lever and allow base to drop to new setting. The depth of cut will then be the exact thickness of the hinge butt. Retighten motor locking lever.





5. LOCKING DEVICE

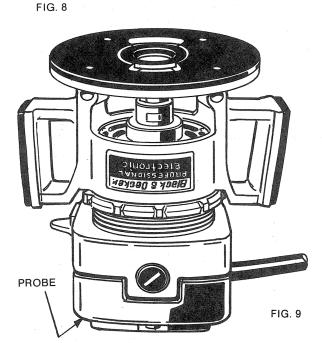
Fig. 5. To lock the motor in desired position in the base, rotate the locking lever clockwise until tight. Reverse direction to release the motor from base. NOTE: Locking lever can fall from base if reversed too far—Simply replace it if this occurs and no harm will be done.

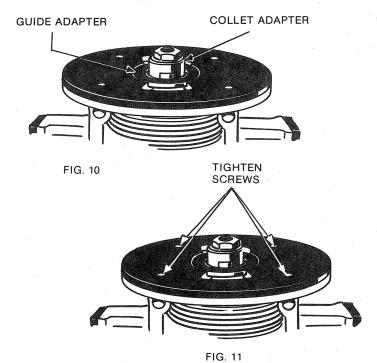
NOTE: Locking position of lever is adjustable if desirable. Simply loosen locking nut until lever is free to turn. Set lever to desired position and re-tighten lock nut.

6. ADJUSTING RING LOCK

Fig. 6. The nylon set screw is provided as a friction device to prevent the adjusting ring from possible rotation due to vibration while cutting. It is not necessary to use the screw every time the router is being used. It is given as an additional feature to be used in situations such as: if two successive cuts are being made and you may want to lock the ring in the upper position to make the deepest cut. After the initial cut is made (approx. ½ of depth), the locking lever is released and the motor drops to the desired position for the second cut. In this case if the ring were not locked, it could rotate on the inital cut, and the second depth position would be lost. When making one cut, snugging down the ring against the base will usually create enough friction to keep the ring from rotating loose. The ring should not be rotated until the set screw has been released. Do not overtighten the screw.

PROBE LOCATION ON/OFF SWITCH





8. ON/OFF SWITCH

The on/off switch is located on the side of the router, just above the hand grip. Figure 8. To turn on the router, raise the on/off switch lever with your thumb while gripping the tool. To turn off the router, pull the switch lever down. When the router is running, you will notice a probe extending from the top of the router. This probe is connected to the on/off switch lever and can be used to turn off the router by pushing it down toward the end cap. This probe also prevents the router from inadvertently being turned on when it is inverted and resting on its end cap. The end cap is designed so that the router can be inverted for temporary storage when changing the work piece and while changing router bits. Figure 9.

9. SUB-BASE ALIGNMENT FOR TEMPLATE ROUTING

Should the sub-base become misaligned with the bit after a severe jar, it can be realigned with the built-in alignment feature.

Unplug the router and remove the motor assembly from base. Remove the guide screw and adjusting ring from the motor housing and loosen the four screws on the sub-base. Reinsert the guide screw in the motor and place the motor housing in the base. Lower the motor until the collet adapter extends through the guide adapter in the sub-base. Tighten the locking lever on the base and center the sub-base around the collet adapter. Tighten the four screws on the sub-base (Figure 11) and the alignment of the bit with the template guide will be re-established. Remove the motor from the base and reassemble with the adjusting ring in its normal location. The alignment is now complete.

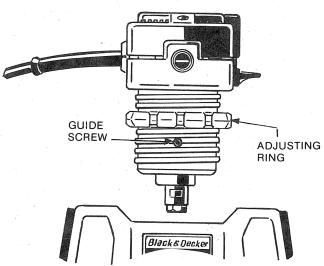


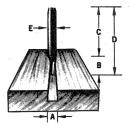
FIG. 12



Cyclone™ Router Bits

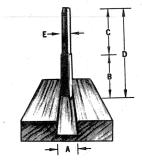
Choose from straight bits, grooving bits, decorating bits, laminate and aluminum trimming bits, and slotting cutters—all designed to stay sharp longer, reduce downtime and costs.

Straight Bits



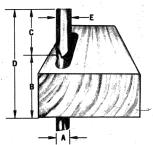
Single Flute

Excellent for roughing and hogging where speed and chip clearance are important.



Two Flutes

Balanced cutting with minimum vibration for smoothness and uniformity of cut.



Stagger Tooth

Offers two flute balance with the cutting speed of a single flute, plus excellent chip clearance. Select bits from three basic materials:

High-Speed Steel Bits

Made from M-2 steel for fast, clean performance in normal routing of wood and aluminum.

Carbide-Tipped Steel Bits

Produced from selected grades of tungsten carbide which is permanently bonded to an alloy steel body. Excellent for routing laminates, plastics, composition board, and plywood.

Solid Carbide Bits

One-piece construction designed to withstand high torques. Excellent for continuous production routing in mills and cabinet shops.

Straight Bits

Single Flute

High-Speed Steel

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|----------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/16 3/32 1/8 | 5/32 3/16 3/8 | 11/4 | 113/32 | 1/4 |
| 3/32 | 3/6 | 11/4 | 17/6 15/8 | 1/4 |
| 1/8 | 3/8 | 11/4 | 15/8 | 1/4 |
| 1/8 | 1/2 | 11/4 | 13/4 | 1/4 |
| 5/22 | 1/2 | 11/4 | 13/4 | 1/4 |
| 3/4 | 5/8 | 11/4 | 17/8 | 1/4 |
| 5/32 3/16 3/16 | 5/8 3/4 | 11/4 | 2 | 1/4 |
| 7/32 1/4 | 5/8 | 11/4 | 2 1% | 1/4 |
| 1/4 | 1 | 11/4 | 21/4 | 1/4 |

| Carbide-T | ip | n | e | 4 |
|-----------|----|---|---|---|
| Out Didc- | ۰, | ۳ | • | ١ |

| | A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | É Shank Dia. |
|---|-------------------|---------------------|---------------------|-----------------------|--------------------|
| - | ₹6 1⁄4 | 1/2 | 11/16 | 111/16 | 1/4 |
| | 1/4 | 3/4 | 1 | 2 | 1/4 |
| | 1/4 | 1 | 1 | 21/4 | 1/4 |
| | 3/8 | 1 | 1 | 21/4 | 3/8 |
| | 3/8 | - 1 | 11/4 | 21/4 21/2 | 1/2 1/2 |
| | 1/2 | 11/4 | 11/4 | 23/4 | 1/2 |
| | 1/2 | 11/2 | 11/4 | 3 | 1/2 |
| | 1/2 | 2 | 13/4 | 4 | 1/2 |

Two Flutes

High-Speed Steel

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|---|---------------------------------|---------------------|-----------------------|--|
| 1/4 | 5/8 | 1 | 15/8 | 1/4 |
| 1/4 | 1 | 11/4 | 21/4 | 1/4 |
| 5/16 | 3/4 3/4 | 1 | 13/4 | 1/4 |
| 3/8 | 3/4 | 1 | 13/4 | 1/4 |
| 3/8 | 1 | 11/4 | 21/4 | 1/4 |
| 1/2 | 3/4 | 1 | 13/4 13/4 | 1/4 |
| 5/8 | 3/4 | 1 | 13/4 | 1/4 |
| 1/4 5/16 3/8 3/8 1/2 5/8 3/4 1 1/4 | 3/4 | 1 | 13/4 | 1/4 |
| 11/4 | 11/22 | 111/2 | 111/6 | 1/4 |
| 3/8 | 3/4 3/4 3/4 11/32 1 | 11/32 | 21/2 | 1/2 |
| 1/2 | 11/4 | 11/2 | 23/4 | 1/2 |
| 1/2 | 11/2 | 11/2 | 3. | 1/2 |
| 5/8 | 11/4 | 11/2 | 23/4 | 1/2 |
| 3/8 1/2 1/2 5/8 3/4 | 11/4 | 11/2 | 23/4 | V4 V4 V4 V4 V4 V2 V2 V2 V2 |

Carbide-Tipped

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|--|--------------------------|---|---|--|
| 1/8 | 5/16 | 1 | 11/2 | 1/4 |
| 3/6 | 1/2 3/4 | 1 | 15⁄8 | 1/4 |
| 1/4 | 3/4 | 1 | 2 | 1/4 |
| 1/4 | 1 | 1 | 25/6 | 1/4 1/4 1/4 |
| 5/6 | 1 | 11/16 | 21/4 | 1/4 |
| 3/8 | 1 | 11/16 | 21/4 | 1/4 |
| 3/6 1/4 1/4 5/6 3/8 1/2 5/8 3/4 | 1 | 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 1 | 15/8 2 25/6 21/4 25/6 21/6 21/6 21/8 21/4 | 1/4 |
| 5/8 | 3/4 3/4 3/4 | 1/16 | 21/16 | 1/4 |
| 3/4 | 3/4 | 1/16 | 21/16 | 1/4 |
| 1/4 | 3/4 | 1 | 21/8 | 1/4 3/8 |
| 1/4 3/8 3/8 1/2 5/8 3/4 | 1 1¼ 1 1 | 1. | 21/4 | 3/8 |
| 3/8 | 11/4 | 2 | 236 | 3/8 |
| 1/2 | 1 | 1 | 23/8 | 3/8 |
| 5/8 | 3/4 | 11/6 | 23/8 2 2 21/4 21/2 | 3/8 |
| 3/4 | 3/4 | 1/16 | . 2 | 3/8 |
| 5/16 | 3/4 | 11/4 | 21/4 | 1/2 |
| 3/8 | 1 | 11/4 | 21/2 | 1/2 |
| 1/16 | 3/4 3/4 1 1 1/4 | 11/4 | 2 3/4 | 1/2 |
| 1/2 | 1 | 11/4 | 21/2 | 1/2 |
| 5/6 3/8 3/6 1/2 1/2 1/2 1/2 3/4 | 11/4 | 11/4 11/4 | 2½ 2¾ | 3/8 1/2 1/2 1/2 1/2 1/2 |
| 1/2 | 1½ 2 1¼ | 1 1/4 1 3/4 | 3 4 27/8 | 1/2 |
| 1/2 | 2 | 13/4 | 4 | 1/2 1/2 |
| 3/4 | 11/4 | 11/4 | 21/8 | 1/2 |
| - 1 | 11/4 | 11/4 | 27/8 | 1/2 |

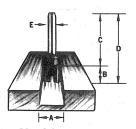
Stagger Tooth

Carbide-Tipped

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overali Lgth. | E Shank Dia. |
|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 3/8 | 13/8 | 11/8 | 2¾ | 3/8 |
| 3/8 | 13/8 | 11/4 | 21/8 | 1/2 |
| 1/2 | 11/2 | 11/8 | 31/4 | 1/2 |
| 1/2 | 2 | 11/2 | 4 | 1/2 |
| 5/8 | 2 | 21/4 | 41/2 | 1/2 |

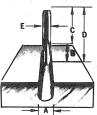


Grooving Bits



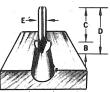
Hinge Mortising

Fast, clean cutting of hinge butt mortises with all makes of doorhanging templates.



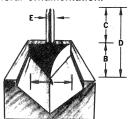
Veining

Excellent for decorative freehand routing, carving, and inlay work.



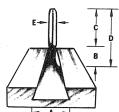
Core Box

Especially effective in reeding, fluting, letter cutting, and general ornamentation.



"V" Grooving

Ideal for smooth "V" cuts in paneling, lettering and signs, edge mitering, and general decorative work.



Dovetail

Excellent for cutting dovetail joints in wood, composition board, plywood, and laminates.

Hinge Mortising High-Speed Steel

| A | B | C | D | E |
|--------|----------|-------|---------|--|
| Cut. | Flute | Shank | Overall | Shank |
| Dia. | Lgth. | Lgth. | Lgth. | Dia. |
| 1/2 | 1/2 | 1 ½ | 2 2 | 1/4 |
| 5/8 | 1/2 | 1 ¼ | | 1/4 |
| arbide | e-Tipped | | | NAME OF TAXABLE PARTY O |
| A | B | C | D | E |
| Cut. | Flute | Shank | Overall | Shank |
| Dia. | Lgth. | Lgth. | Lgth. | Dia. |
| 1/2 | 5/8 | 1½ | 1 1/8 | 1/4 |
| 5/8 | 5/8 | 1½ | 1 1/8 | 1/4 |
| 3/4 | 3/4 | 1½ | 2 1/4 | 1/4 |
| 11/4 | 1/2 | 11/2 | 2 | 1/4 1/4 |

Veining

High-Speed Steel

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|---------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/16 3/32 1/8 | 3/6 3/6 5/6 | 1 1 1 | 13/6 13/6 15/4 | 1/4 1/4 1/4 |
| ⅓6 ⅓2 | 7/16 7/16 | 1 | 15/6 17/6 17/6 | 1/4 1/4 |
| Solid | Carbide | | | |
| A | B Flute | C | D | E |

Core Box

High-Speed Steel

| r Rad. | A Cut. Dia. | B Cut Lgth. | C Shank Lgth. | D Overali Lgth. | E Shank Dia. |
|-------------|-------------------|-------------------|---------------------|-----------------------|--------------------|
| 1/8 | 1/4 | 1/4 | 1 | 11/4 | 1/4 |
| 3/6 | 3/8 | 1/4 | - 1 | 11/4 | 1/4 |
| 3/16 1/4 | 1/2 | 11/32 | 1 | 111/2 | 1/4 |
| 5/16 | 5/8 | 3/8 | 1 | 13/8 | 1/4 1/4 |
| 3/8 | 3/4 | 15/32 | 1 | 115/2 | 1/4 |

Carbide-Tipped

| r Rad. | A Cut. Dia. | B Cut Lgth. | C Shank Lgth | D Overall Lgth. | E Shank Dia. |
|-------------|-------------------|-------------------|--------------------|-----------------------|--------------------|
| 1/8 | 1/4 | 5/32 | 1 | 11/4 | 1/4 |
| 3/16 1/4 | 3/8 | 32 1/4 | . 1 | 13/8 | 1/4 |
| | 1/2 | 3/8 | . 1 | 1 1/2 | 1/4 |
| 5/16 | 5/8 | %6 | . 1 | 11/2 | 1/4 |
| 3/8 | 3/4 | 1/2 | 1 | 11/2 | 1/4 |

"V" Grooving High-Speed Steel

| A Cut. Dia. | B Depth of Cut | C Shank Lgth. | D Overali Lgth. | E Shank Dia. |
|-------------------|----------------------|---------------------|-----------------------|--------------------|
| 3/8 | 7/16 | 1 | 1% | 1/4 |
| 7/8 | 15/ | 1 | 115/ | 1/4 |

Carbide-Tipped

| A Cut. Dia. | B Depth of Cut | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|----------------------|---------------------|-----------------------|--------------------|
| 1/4 | 5/32 | 15/8 | 2 | 1/4 |
| 3/8 | 1/4 | 1 | 111/4 | 1/4 |
| 3/4 | 3/8 | 11/2 | 111/16 27/8 | 1/2 |
| 1 | 1/2 | 11/2 | 21/8 | 1/2 |

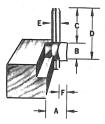
Dovetail

High-Speed Steel

| A | B | C | D | E |
|------|--------|-------|---------|-------|
| Cut. | Depth | Shank | Overall | Shank |
| Dia. | of Cut | Lgth. | Lgth. | Dia. |
| 1/4 | 3/8 | 1 1/4 | 15/8 | 1/4 |
| 1/2 | 17/32 | 11/16 | 119/32 | 1/4 |

Carbide-Tipped

| A Large Dia. | Degree Ea. Side | B Depth of Cut | C Shaok Lgth. | D Over- all Lgth. | E Shank Dia. |
|--------------------|-----------------------|----------------------|---------------------|----------------------------|--------------------|
| 3/8 | 9° 18′ | 3/8 | 1 | 17/16 | 1/4 |
| 1/2 | 140 | 1/2 | 11/16 | 1% | 1/4 |

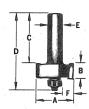


Rabbeting

For smooth, fast rabbeting, and step cutting of edges without a router guide.

High-Speed Steel with self-guiding pilot.

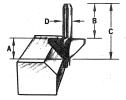
| A Large Dia. | B Cut. Lgth. | C Shank Lgth. | D Over- all Lgth. | E Shank Dia. | F Depth of Rab. |
|--------------------|--------------------|---------------------|----------------------------|--------------------|--------------------------|
| 3/4 | 7/16 | 1 | 111/16 | 1/4 | 1/4 |
| 1 | %16 | : 1 | 113/16 | 1/4 | 3/8 |



Carbide Tipped wth ball bearing guide.

| A Large Dia. | B Cut. Lgth. | C Shank Lgth | D Over- all Lgth. | E Shank Dia. | F Depth of Rab. | |
|--------------------|--------------------|--------------------|----------------------------|--------------------|--------------------------|--|
| 11/4 | 1/2 | 11/2 | 21/4 | 1/4 | 3/8 | |

Decorating Bits



Chamfering

Excellent for 45° edge cuts and 45° mitered panel joints. High shear angle clears chips fast for chatter-free cut.

High-Speed Steel holds its sharp edge.

| A | В | C | D |
|------------------|----------------|------------------|---------------|
| Depth of Cut. | Shank Lgth. | Overall Lgth. | Shank Dia. |
| %16 | 1 | 113/16 | 1/4 |

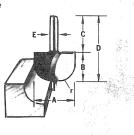


Carbide-Tipped with ball bearing quide.

| Out Dide-11 | ppea with | Dall Deal | ing guide |
|-------------|-----------|-----------|-----------|
| A | В | C | D |
| Depth | Shank | Overall | Shank |
| of Cut. | Lgth. | Lgth. | Dia. |
| 7/4 | 1 | 1% | 1/4 |



Decorating Bits (Cont'd) Cove

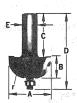


Cove

Router bit pilot eliminates need for supplemental fences, templates, and guides in decorative edging.

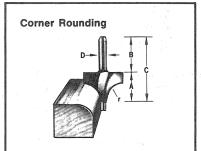
High-Speed Steel.

| Rad. | A Large Dia. | B Cut. Lgth. | C Shank Lgth. | D Over- all Lgth. | E Shank Dia. |
|------|--------------------|--------------------|---------------------|----------------------------|--------------------|
| 3/16 | 1/2 | 1/2 | 1 | 13/4 | 1/4 |
| 1/4 | 5/8 | 1/2 | 1 | 13/4 | 1/4 |
| 3/8 | 7/8 | 3/4 | 1 | 2 | 1/4 |
| 1/2 | 11/8 | 3/4 | 1 | 2 | 1/4 |



Carbide-Tipped with ball bearing guide.

| r Rad. | A Large Dia. | B Cut. Lgth. | C Shank Lgth. | D Over- all Lgth. | E Shank Dia. |
|-----------|--------------------|--------------------|---------------------|----------------------------|--------------------|
| 1/4 | 7/8 | 1/2 | 1 | 11/2 | 1/4 |
| 3/8 | 11/8 | 1/2 | 1 | 13/4 | 1/4 |
| 1/2 | 1 3/6 | 5/6 | 1 | 1 3/4 | 1/4 |



Corner Rounding

For decorative edging and smooth, uniform rounding of sharp edges.

High-Speed Steel minimizes resharpening.

| r Rad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|-----------|----------------------|---------------------|-----------------------|--------------------|
| 3/16 | 3/8 | 1 | 15/8 | 1/4 |
| 1/4 | 1/2 | 1 1 | 13/4 | 1/4 |
| 5/16 | 1/2 | 1 | 13/4 | 1/4 |
| 3/8 | 5/8 | 1 | 17/8 | 1/4 |
| 1/2 , | 13/16 | 1 | 21/16 | 1/4 |



Carbide-Tipped with mar-free ball bearing pilot.

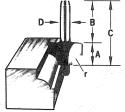
| r Rad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|-----------|----------------------|---------------------|-----------------------|--------------------|
| 1/4 | 1/2 | 11/4 | 13/4 | 1/4 |
| 3/8 | 5/8 | 13/8 | 2 | 1/4 |
| 1/2 | 3/4 | 11/4 | 2 | 1/4 |

Beading

A basic woodworking bit for rounding corners and cutting small edge beads cleanly.



Beading





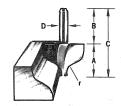
| r Rad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|-----------|----------------------|---------------------|-----------------------|--------------------|
| 1/8 | 3/8 | 1 | 15/8 | 1/4 |
| 1/4 | 1/2 | 1 | 13/4 | 1/4 |
| 3/8 | 3/4 | 1 | 2 | 1/4 |
| 1/2 | 3/4 | 1 | 2 | 1/4 |



Carbide-Tipped (Ball Bearing Guide)

| • | r Rad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|---|-----------|----------------------|---------------------|-----------------------|--------------------|
| | 3/16 | 1/2 | 11/4 | 13/4 | 1/4 |
| | 1/4 | 1/2 | 11/4 | 13/4 | 1/4 |
| | 3/8 | 5/B | 13/8 | 2 | 1/4 |
| _ | 1/2 | 3/4 | 11/4 | 2 | 1/4 |

Ogee



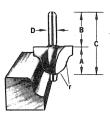
For attractive, eye-catching grooving and edge-forming cuts. Use with a template or straight edge guide.

High-Speed Steel

| r Rad. | A Depth Cut | B Shank Lgth. | C Over- all Lgth. | D Shank Dia. |
|-----------|-------------------|---------------------|----------------------------|--------------------|
| 3/16 | 5/8 | 1 | 15/8 | 1/4 |
| %32 | 29/32 | 1 | 12%2 | 1/4 |

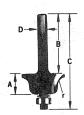
Roman Ogee

For producing decorative edges and cuts on period furniture.



High-Speed Steel

| r Rad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|-----------|----------------------|---------------------|-----------------------|--------------------|
| 5/32 | 1/2 | 1 | 13/4 | 1/4 |
| 1/4 | 3/4 | 1 | 2 | 1/4 |



Carbide-Tipped (Ball Bearing Pilot)

| F | r lad. | A Depth of Cut | B Shank Lgth. | C Overall Lgth. | D Shank Dia. |
|---|-----------|----------------------|---------------------|-----------------------|--------------------|
| | 5/32 | 15/32 | 11/4 | 21/4 | 1/4 |
| | 1/4 | 21/32 | 1 1/4 | 23/8 | 1/4 |



Laminate Trimming Bits, Solid Carbide



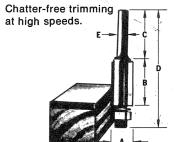
Flush Trimming

Makes flush square corners and small, intricate cuts on laminated plastics.

| Type of Cut | A Cut. Edge | B Overall Lgth. | C Shank Dia. |
|----------------|-------------------|-----------------------|--------------------|
| Flush 0° | %6 | 11/2 | 1/4 |

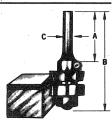
Laminate Trimming Assemblies and Replacement Bits

Trim Tool Assemblies



Two Flute, Carbide Tipped. Complete with high-speed, ballbearing guide and dust-slinger shield.

| A Cut. Dia. | B Cut. Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|--------------------|---------------------|-----------------------|--------------------|
| 3/8 | 1/2 | 1 | 21/4 | 1/4 |
| 3/8 | 1 | 1 | 23/4 | 1/4 |
| 1/2 | 1/2 | 1 | 21/4 | 1/4 |
| 1/2 | 1 | 1 | 23/4 | 1/4 1/2 |
| 1/2 | 1 | 1 | 31/4 | 1/2 |
| 25° | %32 | 11/8 | 2 | 1/4 |
| hovol | | | | |



Four Flute, Carbide Tipped. Completely assembled with arbor, cutter, and high-speed shielded ball-bearing guide.

| Type Cut | A Shank Lgth. | B Overali Lgth. | C Shank Dia. |
|-------------|---------------------|-----------------------|--------------------|
| flush | 1 | 23/8 | 1/4 |
| 15° | 1 | 23/8 | 1/4 |
| 25° | 1 | 23/8 | 1/4 |

Bevel Trimmer

Puts a 7° bevel on finished edge of laminated plastic used to face cabinets, furniture, doors.

| Type A | | B | C |
|-------------|------|---------|-------|
| of Cut Cut. | | Overall | Shank |
| Edge | | Lgth. | Dia. |
| 70 | 5/16 | 11/2 | 1/4 |

Hole and Flush Trim

Drills its own hole and trims laminated plastic, leaving a clean, sharp, flush edge

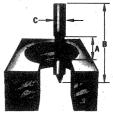
| Type of Cut | A Cut. Edge | B Overall Lgth | C Shank Dia. |
|----------------|-------------------|----------------------|--------------------|
| Drill Flush | 3/8 | 11/2 | 1/4 |

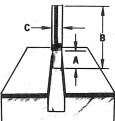
Rip and Slotting

For chip-free ripping and slotting of laminated plastics, non-ferrous metals, woods, and plastics.

| Type of Cut | A Cut. Edge | B Overall Lgth. | C Shank Dia. |
|-----------------|-------------------|-----------------------|--------------------|
| Cut Off Slot | 3/8 | 11/2 | 1/4 |





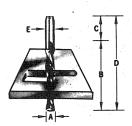


Flush and Bevel Trim Bits for Laminate Trimmers

Carbide tipped. Made to manufacturer's specifications. Designed for use with Black & Decker, Stanley, and Millers Falls laminate trimmers.

| | Description |
|---|---|
| | 22° bevel, ¾″ dia., ¼″ shank |
| | Combination flush and 22° bevel, ¾″ dia., ¼″ shank |
| | Combination flush and 22° bevel, ¾″ dia., ¼″ shank |
| 3 | 22° bevel, ¾″ dia., ¼″ shank |
| | Combination flush and 22° bevel, ¼" shank |

Trimming Bits for Aluminum



Spiral flute, high-speed steel, shear-cut bits for trimming and cutting aluminum, non-ferrous metals, some plastics, and some woods.

Down Spiral

Recommended for shallow inlay slotting to minimize chipping.

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/8 | 3/8 | 1 1/8 | 21/4 | 1/4 |
| 1/4 | 1 | 13/4 | 23/4 | 1/4 |

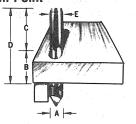
Up Spira

Recommended for deep slotting to remove chips from the cut.

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/8 | 3/8 | 17/8 | 21/4 | 1/4 |
| 1/4 | 1 | 13/4 | 23/4 | 1/4 |
| 3/8 | 1 | 13/4 | 23/4 | 3/8 |



Panel Pilot Bits with Drill Point



Fast fast cutting of openings to exact dimensions through covering materials.

High-Speed Steel

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/4 | 3/4 | 15/6 | 25/6 | 1/4 |
| 3/B | 7/8 | 11/8 | 21/4 | 3/8 |
| 1/2 | 1 | 11/8 | 23/8 | 1/2 |
| 3/8 | 1 | 11/8 | 23/8 | 3/8 |

Carbide-Tipped

Single Flute

| A Cut. Dia. | B Flute Lgth. | C Shank Lgth. | D Overall Lgth. | E Shank Dia. |
|-------------------|---------------------|---------------------|-----------------------|--------------------|
| 1/4 | 7∕8 | ٦ | 21/2 | 1/4 |
| 3/8 | 1 | 11/8 | 3 | 3/8 |
| 3/8 | 15/16 | 11/16 | 3 | 1/2 |
| 1/2 | 11/4 | 1 1/4 | 31/2 | 1/2 |
| 1/2 | 2 | 2 | 41/2 | 1/2 |
| Two F | lute | | | |
| 3/6 | 1 | 1 | 27/6 | 1/4 |

Slotting Cutters

Carbide Tipped. For weatherstrip and trim strip applications, and for kerfing wood and composition boards.

Arbor Hole: \%"
Cutter Diameter: 1%"

| A | A B | | neter |
|----------------------|-----------------|------------|------------|
| Kerf Width | Depth of Cut | C Total | D Shank |
| 1/16 5/64 3/32 | 1/2 | 15⁄8 | 1/4 |
| 1/4 | 3 /32 | 13/16 | 1/4 |

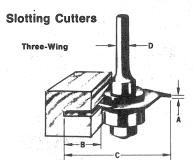
Slotting Cutters Two-Wing

Two-Wing Assemblies

| A | В | Diameter | |
|---------------------|-----------------|------------|------------|
| Kerf Width | Depth of Cut | C Total | D Shank |
| 1/16 | | | |
| 5/64 3/32 1/8 | 1/2 | 1 7/8 | 1/4 |
| 1/4 | | | |

Two-Wing, Carbide-Tipped Replacement Cutters

| A | В | Diameter | | |
|--------------------------------|-----------------|------------|------------|---|
| Kerf Width | Depth of Cut | C Total | D Shank | • |
| 16 564 332 1/8 1/4 | 1/2 | 1 7/8 | 1/4 | |



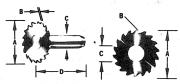
Three-Wing Assemblies

| A B | | Dian | neter |
|--------------------------|-----------------|------------|------------|
| Kerf Width | Depth of Cut | C Total | D Shank |
| 1/16 5/4 | | | - Maryer 1 |
| 716 564 332 1/8 | 1/2 | 1 1/8 | 1/4 |
| 1/4 | | | |

Three-Wing, Carbide-Tipped Replacement Cutters

| A | В | Diar | neter |
|------------------------|-----------------|------------|------------|
| Kerf Width | Depth of Cut | C Total | D Shank |
| 1/16 | i. | | |
| 16 564 32 1/8 | 1/2 | 1 7/8 | 1/4 |
| 1/8 1/4 | | | |

Trimming Saw



Solid Carbide. Designed for the professional applicators.

Assembly

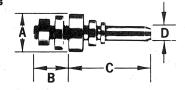
| A | В | C | D |
|-------|-------|-------|--------|
| Blade | Kerf | Shank | Shank |
| Dia. | Width | Dia. | Length |
| 3/4 | 1/32 | 1/4 | 1 |

Saw Blade, Solid Carbide

| A | В | C |
|---------------|---------------|--------------|
| Blade Dia. | Kerf Width | Shank Dia |
| via. | winti | Dia. |
| 3/4 | 1/2 | 1/4 |

Replacement Parts

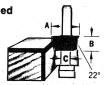
Arbors



Bearings



Carbide-Tipped Trim Cutters

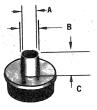


| A Overall Dia. | B Arbor Lgth. | C Shank Lgth. | D Shank Dia. | Thread |
|----------------------|---------------------|---------------------|--------------------|--------|
| 5/8 | 7/8 | 11/4 | 1/4 | 1/4-24 |
| 1/2 | 7/8 | 1 1 | 1/4 | %-24 |
| 1/2 | 7/8 | 1. | 3/8 | 5/6-24 |
| 1/0 | 7/- | 4 : | 1/- | 5/ 04 |

| - | A Outside Dia. | B Inside Dia. |
|---|---|---------------------|
| | 13/6 | 1/4 |
| | 3/8 | ₹6 |
| | 3/8 | 1/8 |
| | 1/ ₂ 7/ ₈ 5/ ₈ | 3/6 |
| | 7/8 | 5/6 |
| | 5/8 | 1/4 |

TEMPLATE GUIDES





Template routing is the fastest and most accurate method of duplicating intricate designs. Black & Decker's complete new line of template guides from 5/16" to 1%" permits a wide selection of Router applications where templates are required for precise, duplicate cutting.

Each template guide is quickly attached to the router sub-base with a common nut #62942. No extra hardware required.

| CAT. NO. | A IN. | B IN. | C IN. |
|----------|----------|----------|----------|
| ① C62943 | 17/64 | 5/16 | 3/16 |
| C62944 | 9/32 | 3/8 | 3/16 |
| ② C62945 | 11/32 | 7/16 | 3/16 |
| C62946 | 13/32 | 1/2 | 3/8 |
| 3 C62947 | 17/32 | 39/64 | 5/8 |

For use with % " radius hinges.

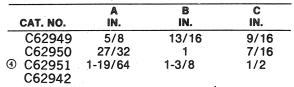


COLLETS

Collet-type chucks are also available in 1/4" size, Cat. No. 62132 and 3/8" size, Cat. No. 64119 to accommodate all shank sizes of the wide range of Black & Decker bits and cutters.

IMPORTANT

To assure product SAFETY and RELIABILITY, repairs, maintenance and adjustment (including brush inspection & replacement) should be performed by BLACK & DECKER Service Centers or other qualified service organizations, always using BLACK & DECKER replacement parts. Because of possible damage to the electronic circuitry by static electricity, removal of the end cap by the user is not recommended.



Template guide nut fits all of above guides. Please order separately.



STRAIGHT EDGE GUIDE CAT. NO. 63977

The straight edge guide provides an accurate guide fence for routing along the edge of straight pieces of stock. Lock screws in the sub-base must be tightened after desired setting is made. Mounting holes have been provided for addition of edge guide extensions where required.

CAUTION

ONLY THE ACCESSORIES SHOWN IN THIS MANUAL ARE RECOMMENDED FOR **USE WITH YOUR ROUTER.** THE USE OF ANY OTHER ACCESSORY OR ATTACH-MENT MIGHT BE HAZARD-OUS.

The accessories listed in this manual are available at extra cost from your local dealer, Black & Decker Service Center, or by writing to: Customer Services, Black & Decker (U.S.) Inc., Hampstead, Maryland 21074.

Commercial/Industrial Use Warranty

Black & Decker warrants this product for one year from date of purchase. We will repair without charge, any defects due to faulty material or workmanship. Please return the complete unit, transportation prepaid, to any Black & Decker Service Center or Authorized Service Station listed under "Tools Electric" in the yellow pages. This warranty does not apply to accessories or damage caused where repairs have been made or attempted by others.

> **BLACK & DECKER (U.S.) INC. Professional Products Division** 626 Hanover Pike, Hampstead, MD 21074 U.S.A.

① For use with ¼" dovetail template. ② For use with ½" dovetail template.

For use with hinge mortising template.